## ABSTRACT OF THE DISCLOSURE

A system and method for performing a handover operation in a broadband wireless access (BWA) communication system. The BWA communication system includes a serving BS (Base Station), (Subscriber Station), and a plurality of neighbor BSs adjacent to the serving BS. The SS handover method upon receiving a handover request from the SS in the BWA communication system includes the steps of: a) receiving from the serving BS information of the plurality of neighbor BSs; b) measuring CINRs (Carrier to Interference and Noise Ratios) of pilot signals transferred from the neighbor BSs upon receipt of the neighbor BSs information; c) transmitting to the serving BS a handover request signal along with pilot signal CINR information of the neighbor BSs; d) upon receipt of the handover request signal, receiving from the serving BS information of a handover enable target BS contained in the neighbor BSs; and e) performing a handover function from the serving BS to the target BS.

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